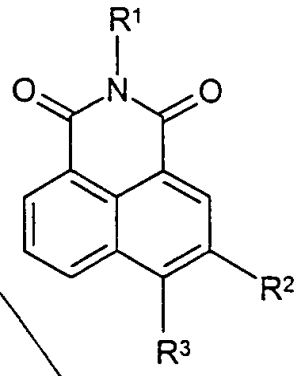
CLAIMS

WE CLAIM:

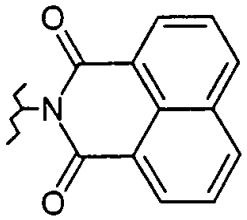
1. A pharmaceutical composition comprising a compound of Formula I,



(I)

wherein

R^1 is selected from alkyl; aryl-loweralkyl; heterocycle-loweralkyl; loweralkyl-carbonate; amino optionally monosubstituted or disubstituted with a substituent selected from loweralkyl, aryl and hydroxyloweralkyl; benzimidaz-2-yl;



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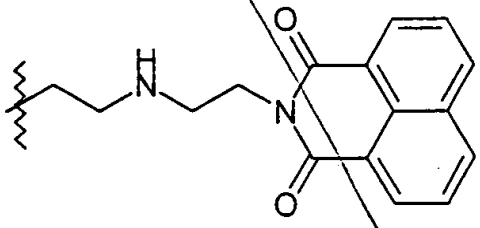

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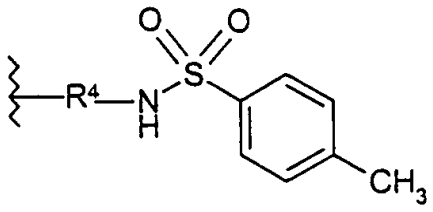
and

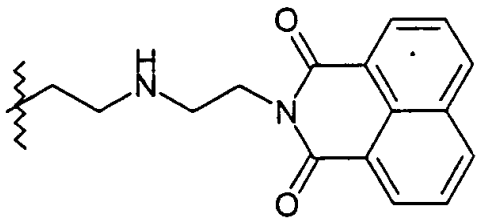


wherein R^4 is phenyl optionally monosubstituted or disubstituted with a substituent selected from loweralkyl and halo; phenyl optionally monosubstituted or disubstituted with a substituent selected from amino, loweralkoxy, hydroxy and loweralkyl; $NHCH_2CH_2OX$ wherein X represents an *in vivo* hydrolyzable ester; and loweralkyl-$(R^5)(R^6)$ wherein one of R^5 and R^6 is selected from H and loweralkyl and the other is selected from carboxy, carboxy-loweralkyl and loweralkoxycarbonyl; and

R^2 and R^3 are independently selected from H, NO_2, halo, di(loweralkyl)amino, cyano, C(O)OH, phenyl-S-, loweralkyl, and $Z(O)OR^7$ wherein Z is selected from C and S and R^7 is selected from H, loweralkylamino and arylamino;

and pharmaceutically acceptable salts thereof, in an amount effective to inhibit neurotrophin-mediated activity, and a suitable carrier.

2. A pharmaceutical composition according to claim 1, wherein R^1 is selected from alkyl; aryl-loweralkyl; heterocycle-loweralkyl; loweralkyl-carbonate; amino optionally monosubstituted or disubstitutued with a substituent selected from loweralkyl and hydroxyloweralkyl; benzimidaz-2-yl;



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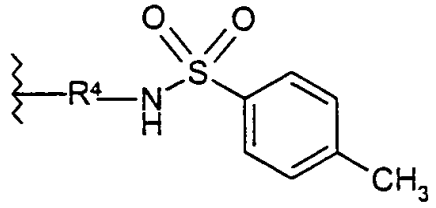

wherein R^4 is phenyl optionally monosubstituted or disubstituted with a substituent selected from loweralkyl and halo; phenyl optionally monosubstituted or disubstituted

with a substituent selected from amino, loweralkoxy, hydroxy and loweralkyl; $NHCH_2CH_2OX$ wherein X represents an *in vivo* hydrolyzable ester; and loweralkyl-$(R^5)(R^6)$ wherein one of R^5 and R^6 is selected from H and loweralkyl and the other is selected from carboxy, carboxy-loweralkyl and loweralkoxy-carbonyl; and

R^2 and R^3 are independently selected from H, NO_2, halo, di(loweralkyl)amino, and phenyl-S-.

Sub A' cont.

3. A pharmaceutical composition according to claim 2, wherein R^1 is selected from aryl-loweralkyl; heterocycle-loweralkyl; loweralkyl-carbonate; amino optionally monosubstituted or disbstitutued with a substituent selected from loweralkyl and hydroxyloweralkyl; benzimidaz-2-yl; $NHCH_2CH_2OX$ wherein X represents an *in vivo* hydrolyzable ester; and loweralkyl-$(R^5)(R^6)$ wherein one of R^5 and R^6 is selected from H and loweralkyl and the other is selected from carboxy, carboxy-loweralkyl and loweralkoxy-carbonyl; and

R^2 and R^3 are independently selected from H, NO_2, di(loweralkyl)amino, and phenyl-S-.

4. A pharmaceutical composition according to claim 3, wherein R^1 is selected from amino optionally monosubstituted or disbstitutued with a substituent selected from loweralkyl and hydroxyloweralkyl; $NHCH_2CH_2OX$ wherein X represents an *in vivo* hydrolyzable ester; and loweralkyl-$(R^5)(R^6)$ wherein one of R^5 and R^6 is selected from H and loweralkyl and the other is selected from carboxy, carboxy-loweralkyl and loweralkoxy-carbonyl; and

R^2 and R^3 are independently selected from H and NO_2.

5. A pharmaceutical composition according to claim 1 wherein the compound of Formula I is selected from the group consisting of:

N-{5-Nitro-1H-benz[de]isoquinoline-1,3(2H)-dione}-2-aminoethanol;

N-Dimethylamino-1,3-dioxo-5-nitro-1,2,3,4-tetrahydrobenzo[i]isoquinoline;

N-(1,3-Dioxo-5-nitro-1,2,3,4-tetrahydrobenzo[i]isoquinoline)acetic acid;

N-Acetoxy-1,3-dioxo-1,2,3,4-tetrahydrobenzo[i]isoquinoline;

N-(1,3-Dioxo-5-nitro-1,2,3,4-tetrahydrobenzo[i]isoquinoline)aminoethanol;

N-Furfuryl-1,8-naphthalimide;

6-(N,N-Dimethylamino)-2-(benzimidazol-2-yl)naphthalimide;

N-(Pyrid-2-ylethyl)-1,8-naphthalimide;

1,3-Dioxo-6-phenylmercapto-N-(pyrid-2-ylethyl)-1,2,3,4-tetrahydro-benzo[i]isoquinoline;

2-{2-(4-Methylphenylsulphonamido)phenyl}-6-(N,N-dimethylamino)-naphthalimide;

1,3-Dioxo-2-{2-(4-methylphenylsulphonamido)phenyl}-1,2,3,4-tetrahydro-benzo[i]isoquinoline;

N-Octyl-5-nitronaphthalimide;

5-Bromo-1,3-dioxo-N-methylpyrid-3-yl-1,2,3,4-tetrahydrobenzo-[i]isoquinoline;

1,3-Dioxo-5-nitro-N-(pyrid-2-ylethyl)-1,2,3,4-tetrahydro[i]isoquinoline;

6-Nitro-2-(tetrahydrofuran-2-ylmethyl)naphthalimide;

N-(1,3-Dioxo-1,2,3,4-tetrahydrobenzo[i]isoquinoline)aminoethanol;

Naphthalicacid-N-aminoimide;

2-{2-(4-Methylbenzsulphonamido)-4,5-dichlorophenyl}naphthalimide;

3-Nitro-1,8-(N-propioncarboxylate)succinamidonapthalene;

1,3-Dioxo-2-(2-aminophenyl)-1,2,3,4-tetrahydrobenzo[i]isoquinoline;

6-Nitro-2-(pyrid-3-methyl)naphthalimide;

3-Amino-7,4-bis(ethyl-1,3-dioxo)-1,2,3,4-tetrahydrobenzo[i]isoquinoline;

2-(Benzimidaz-2-yl)-1,3-dioxo-1,2,3,4-tetrahydrobenzo[i]isoquinoline;

2-(2-Aminophenyl)naphthalimide;

1,3-Dioxo-2-{4,5-dimethyl-2-(4-methylphenylsulphonamido)phenyl}-1,2,3,4-tetrahydrobenzo[i]isoquinoline;

3-Methyl-3-(1,3-dioxo-5-nitro(1H,3H)benz[de]isoquinolyl)butyric acid methylester;

1,3-Dioxo-N-methyltetrahydrofurfur-2-yl-5-nitro-1,2,3,4-tetrahydro-[i]isoquinoline;

N-(4-Ethoxyphenyl)-5-nitronaphthalimide;

6-Nitro-2-(furfuryl)naphthalimide;

Ethyl-5-nitro-1,3-dioxo-1H-benz[de]isoquinoline-2-3H-acetate;

Naphthalicacid-N,N'-diimide;

2-(2-Hydroxyphenyl)naphthalimide;

5-Amino-N-butylnaphthalimide;

1,3-Dioxo-5-nitro-n-propylmorpholino-1,2,3,4-tetrahydrobenzo[i]isoquinoline;

6-Nitro-2-(pyrid-2-ylethyl)naphthalimide;

N-Methylnaphthalimide;

N-(Pyrid-2-ylmethyl)naphthalimide;

N-(3,5-Dimethylphenyl)-1,8-naphthalimide;

6-Bromo-N-dimethylamino-1,3-dioxo-1,2,3,4-tetrahydrobenzo-[i]isoquinoline;

N-(1,3-Dioxo-6-phenylmercapto-1,2,3,4-tetrahydrobenzo[i]isoquinoline)-aminoethanol; and

N-Anilino-1,8-naphthalimide.

6. A pharmaceutical composition according to claim 2 wherein the compound of Formula I is selected from the group consisting of:

N-{5-Nitro-1H-benz[de]isoquinoline-1,3(2H)-dione}-2-aminoethanol;

N-Dimethylamino-1,3-dioxo-5-nitro-1,2,3,4-tetrahydrobenzo[i]isoquinoline;

N-(1,3-Dioxo-5-nitro-1,2,3,4-tetrahydrobenzo[i]isoquinoline)acetic acid;

N-Acetoxy-1,3-dioxo-1,2,3,4-tetrahydrobenzo[i]isoquinoline;

N-(1,3-Dioxo-5-nitro-1,2,3,4-tetrahydrobenzo[i]isoquinoline)aminoethanol;

N-Furfuryl-1,8-naphthalimide;

6-(N,N-Dimethylamino)-2-(benzimidazol-2-yl)naphthalimide;

N-(Pyrid-2-ylethyl)-1,8-naphthalimide;

1,3-Dioxo-6-phenylmercapto-N-(pyrid-2-ylethyl)-1,2,3,4-tetrahydro-benzo[i]isoquinoline;

2-{2-(4-methylphenylsulphonamido)phenyl}-6-(N,N-dimethylamino)-naphthalimide;

1,3-Dioxo-2-{2-(4-methylphenylsulphonamido)phenyl}-1,2,3,4-tetrahydro-benzo[i]isoquinoline;

N-Octyl-5-nitronaphthalimide;

5-Bromo-1,3-dioxo-N-methylpyrid-3-yl-1,2,3,4-tetrahydrobenzo-[i]isoquinoline;

1,3-Dioxo-5-nitro-N-(pyrid-2-ylethyl)-1,2,3,4-tetrahydro[i]isoquinoline;

6-Nitro-2-(tetrahydrofuran-2-ylmethyl)naphthalimide;

N-(1,3-Dioxo-1,2,3,4-tetrahydrobenzo[i]isoquinoline)aminoethanol;

Naphthalicacid-N-aminoimide;

2-{2-(4-Methylbenzsulphonamido)-4,5-dichlorophenyl}naphthalimide;

3-Nitro-1,8-(N-propioncarboxylate)succinamidonapthalene;

1,3-Dioxo-2-(2-aminophenyl)-1,2,3,4-tetrahydrobenzo[i]isoquinoline;

6-Nitro-2-(pyrid-3-methyl)naphthalimide;

3-Amino-7,4-bis(ethyl-1,3-dioxo-1,2,3,4-tetrahydrobenzo[i]isoquinoline;

2-(Benzimidaz-2-yl)-1,3-dioxo-1,2,3,4-tetrahydrobenzo[i]isoquinoline; and

2-(2-Aminophenyl)naphthalimide.

7. A pharmaceutical composition according to claim 3 wherein the compound of Formula I is selected from the group consisting of:

N-{5-Nitro-1H-benz[de]isoquinoline-1,3(2H)-dione}-2-aminoethanol;

N-Dimethylamino-1,3-dioxo-5-nitro-1,2,3,4-tetrahydrobenzo[i]isoquinoline;

N-(1,3-Dioxo-5-nitro-1,2,3,4-tetrahydrobenzo[i]isoquinoline)acetic acid;

N-Acetoxy-1,3-dioxo-1,2,3,4-tetrahydrobenzo[i]isoquinoline;

N-(1,3-Dioxo-5-nitro-1,2,3,4-tetrahydrobenzo[i]isoquinoline)aminoethanol;

N-Furfuryl-1,8-naphthalimide;

6-(N,N-Dimethylamino)-2-(benzimidazol-2-yl)naphthalimide;

N-(Pyrid-2-ylethyl)-1,8-naphthalimide; and

1,3-Dioxo-6-phenylmercapto-N-(pyrid-2-ylethyl)-1,2,3,4-tetrahydro-benzo[i]isoquinoline.

8. A pharmaceutical composition according to claim 4 wherein the compound of Formula I is selected from the group consisting of:

N-{5-Nitro-1H-benz[de]isoquinoline-1,3(2H)-dione}-2-aminoethanol;
N-Dimethylamino-1,3-dioxo-5-nitro-1,2,3,4-tetrahydrobenzo[i]isoquinoline;
N-(1,3-Dioxo-5-nitro-1,2,3,4-tetrahydrobenzo[i]isoquinoline)acetic acid;
N-Acetoxy-1,3-dioxo-1,2,3,4-tetrahydrobenzo[i]isoquinoline; and
N-(1,3-Dioxo-5-nitro-1,2,3,4-tetrahydrobenzo[i]isoquinoline)aminoethanol.

9. A pharmaceutical composition as defined in claim 1, which inhibits NGF-mediated activity.

10. A method for inhibiting a neurotrophin-mediated activity comprising the step of exposing neuron cells to an effective amount of a composition as defined in claim 1.

11. A method for inhibiting a neurotrophin-mediated activity in a mammal comprising the step of administering to said mammal a therapeutically effective amount of a composition as defined in claim 1.

12. A method as defined in claim 11, wherein said composition is administered intraventricularly.

13. An *in vivo* hydrolyzable ester or amide of a compound selected from the group consisting of:

N-{5-Nitro-1H-benz[de]isoquinoline-1,3(2H)-dione}-2-aminoethanol;
N-(1,3-Dioxo-5-nitro-1,2,3,4-tetrahydrobenzo[i]isoquinoline)acetic acid;
N-(1,3-Dioxo-5-nitro-1,2,3,4-tetrahydrobenzo[i]isoquinoline)aminoethanol;

N-(1,3-Dioxo-1,2,3,4-tetrahydrobenzo[i]isoquinoline)aminoethanol;

Naphthalicacid-N-aminoimide;

3-Nitro-1,8-(N-propioncarboxylate)succinamidonapthalene;

1,3-Dioxo-2-(2-aminophenyl)-1,2,3,4-tetrahydrobenzo[i]isoquinoline;

3-Amino-7,4-bis(ethyl-1,3-dioxo)-1,2,3,4-tetrahydrobenzo[i]isoquinoline;

2-(2-Aminophenyl)naphthalimide; and

2-(2-Hydroxyphenyl)naphthalimide.

Sub A2 con'

add A3